Atty Dkt. No.: BIOT-008 USSN: 09/834,747

## AMENDMENTS

## IN THE CLAIMS:

- 1. (Currently Amended) A method of administering a synthetic plasma-like solution that does not comprise a conventional biological buffer to a subject in need thereof, said method comprising:
- (a) first reducing the level of CO<sub>2</sub> in said subject by at least about 5 mm Hg in an amount sufficient to reduce the risk of acidosis/acidemia; and
- (b) then administering said plasma-like solution to said subject, wherein said plasma-like solution does not include a conventional biological buffer.
- 2. (Original) The method according to Claim 1, wherein said method comprises reducing at least one of the blood level and brain level CO<sub>2</sub> of said subject.
- 3. (Original) The method according to Claim 1, wherein said subject has at least a sub-physiologic blood flow.
- 4. (Original) The method according to Claim 1, wherein said subject is in circulatory arrest.
- (Original) The method according to Claim 1, wherein said subject suffers from hypovolemia.
- (Original) The method according to Claim 1, wherein said subject suffers from hyphemia.
- 7. (Original) The method according to Claim 1, wherein said subject suffers from low blood pressure.
- 8. (Original) The method according to Claim 1, wherein said subject is undergoing surgery.
- 9. (Original) The method according to Claim 8, wherein said surgery is low temperature surgery.
- (Original) The method according to Claim 8, wherein said surgery is stopped heart surgery.

Atty Dkt. No.; BIOT-008 USSN: 09/834,747

- 11. (Original) The method according to Claim 8, where said surgery includes replacing at least a portion of the blood of said subject with said synthetic plasma like solution.
- 12. (Original) The method according to Claim 1, wherein said CO<sub>2</sub> level is reduced using a mechanical means.
- 13. (Original) The method according to Claim 1, wherein said CO<sub>2</sub> level is reduced using a pharmacological means.
- 14. (Previously Presented) The method according to Claim 1, wherein said synthetic plasma like solution comprises:

electrolytes;

- a dynamic buffering system; and
- at least one oncotic agent.
- 15. (Original) The method according to Claim 14, wherein said dynamic buffering system comprises blearbonate.
- 16. (Original) The method according to Claim 14, wherein said electrolytes of said plasma-like solution comprise sodium, potassium, calcium, chloride ion and magnesium.
- 17. (Original) The method according to Claim 14, wherein said solution further comprises a simple sugar.
- 18. (Previously Presented) The method according to Claim 1, wherein said synthetic plasma like solution comprises:

sodium, potassium, calcium, chloride ion and magnesium electrolytes;

bicarbonate; and

at least one starch oncotic agent; and

a simple sugar.

Atty Dkt. No.: BIOT-008 USSN: 09/834,747

Claims 19-25) (Cancelled)